ABSTRACT

The present invention relates generally to a linear steering truck apparatus comprising a bolster member having two ends, the bolster being located along the transverse axis extending generally perpendicular to the longitudinal axis, generally located between and parallel to the transversely extending axles, a means for attaching the linear steering truck to the car body, a plurality of pedestals, a pedestal engaged to an axle bearing, the axle bearing being rotationally engaged to one end of a transversely extending axle, and at least one pedestal being movably attached to at least one other pedestal situated in the same plane along the longitudinal axis, and a means for performing car body steering, where the geometry of pivot points from one axle to the bolster form a trapezoid and the geometry of pivot points from another axle to the bolster form a parallelogram, the pedestals being pivotably connected so that a lateral force at one axle is reacted by the other axle, wherein the car body mass acts as a pendulum mass restoring force, and the apparatus being steered to the center of the track with either end of the truck leading after the trapezoid side yaws.